other Bodies as much rarer as he pleaſes, ſo that Light may find a ready paſſage through tranſparent ſubſtances.

PROP. IX.

Bodies reflect and refract Light by one and the ſame power variouſly exerciſed in various circumſtances.

This appears by ſeveral Conſiderations. Firſt, Becauſe when Light goes out of Glaſs into Air, as obliquely as it can poſſibly do, if its incidence be made ſtill more oblique, it becomes totally reflected. For the power of the Glaſs after it has refracted the Light as obliquely as is poſſible if the incidence be ſtill made more oblique, becomes too ſtrong to let any of its rays go through, and by conſequence cauſes total reflexions. Secondly, Becauſe Light is alternately reflected and tranſmitted by thin Plates of Glaſs for many ſucceſſions accordingly, as the thickneſs of the Plate increaſes in an arithmetical Progreſſion. For here the thickneſs of the Glaſs determines whether that power by which Glaſs acts upon Light ſhall cauſe it to be reflected, or ſuffer it to be tranſmitted. And, Thirdly, becauſe thoſe ſurfaces of tranſparent Bodies which have the greateſt refracting power, reflect the greateſt quantity of Light, as was ſhewed in the firſt Propoſition.

PROP. X.

If Light be ſwifter in Bodies than in Vacuo in the proportion of the Sines which meaſure the refraction of the Bodies, the forces of the Bodies to reflect and refract Light, are